

MAR 21 2002

follows:

Detailed Description of the Invention

On page 8, please replace the paragraph beginning at line 4 and ending at line 19 with the following:


As shown in Fig. 1b, a measuring operation is carried out by securing a liquid barrier around the outer periphery of the first semi-cylindrical element and fastening said barrier around the upper edges 6. The elastic part 7 is directed towards the attachment of the semi-cylindrical element to the support plate **b**, and the liquid barrier material is folded around the end-wall 1' of the first semi-cylindrical element 1 on the other side. The elastic part is fastened along the scale 11 on the semi-cylindrical element so as to enable the available elongation or stretch to be read-off. The end-wall 5' of the second semi-cylindrical element 5 is placed against the end-wall 1' of the first semi-cylindrical element with said upfolded part of said barrier material 8 located therebetween and pressed thereagainst with the aid of a clamp 10, such as to obtain a small clearance 9 between the cylindrical walls. Synthetic urine is introduced through the vertical tube 3. The liquid barrier is first weighted down so as to fill the clearance between the semi-cylindrical elements. A liquid pressure is thereafter built-up against the elastic edge 7 at the same time as a liquid column is formed in the tubes 3, 4, where the pressure can be read-off. Liquid is introduced until leakage occurs at arrow B (Fig. 1c) at the breakthrough pressure.


IN THE CLAIMS:


Please replace claims 15, 26, 29, 35, 36 and 42 as follows.

15. (Amended) A method of achieving in an absorbent article that includes an absorbent body disposed between a liquid-impermeable bottom sheet which is intended to lie distal from a wearer in use, a liquid-permeable upper sheet which is intended to lie proximal to the wearer, and either 1) at least one longitudinally extending liquid barrier on each side of a center line of the upper sheet made of essentially liquid-impervious material and fastened along or adjacent to a respective longitudinally extending side extremity of the absorbent article and comprising a free

elastic sealing edge intended to be stretched against the wearer, or 2) above the upper sheet, a top liquid-impermeable sheet which is intended to lie against the wearer, includes elastic for shaping the article to the wearer's body, and includes apertures intended to lie in register with the anus and the urethra orifice of the wearer, around which apertures elastically puckered sealing edges are disposed in the top sheet,

 an improved sealing ability against the skin of the wearer, at a given available elongation, by at least one sealing edge on each side of the center line, comprising modifying or treating the absorbent article in such a way as to cause the absolute value of $\Delta P = 2\gamma \cos\theta_m / r$ for said sealing edge to increase, where γ designates the surface tension of a liquid to be absorbed by suction, r designates the radius of the largest circle that can be encompassed in any pore with walls formed by said sealing edge against the wearer's skin at the given available elongation, and $\cos\theta_m$ is the weighted mean value of $\cos\theta$, where θ is the wetting angle of the liquid to the sealing edge or the skin comprising the pore walls.

 26. (Amended) The method according to Claim 25, comprising treating said sealing edge such that a higher wetting angle of the liquid to the sealing edge comprising the pore wall will be obtained and/or such that a higher wetting angle of the liquid to the skin of the wearer will be obtained within those regions in which said sealing edge lies against the skin when the absorbent article is donned.

 29. (Amended) An absorbent article that includes an absorbent body disposed between a liquid-impermeable bottom sheet which is intended to lie distal from a wearer in use, a liquid-permeable upper sheet which is intended to lie proximal to the wearer, and either 1) at least one longitudinally extending liquid barrier on each side of a center line of the upper sheet, made of essentially liquid-impervious material and fastened along or adjacent to a respective longitudinally extending side extremity of the article and including a free elastic sealing edge intended to be stretched against the wearer, or 2) above the upper sheet, a liquid-impermeable top sheet which is intended to lie against the wearer, includes elastic for shaping the article to the wearer's body, and includes apertures intended to lie in register with

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the anus and the urethra orifice of the wearer, around which apertures elastically puckered sealing edges are disposed in the top sheet where, in respect of at least one sealing edge on each side of the center line of said absorbent body, the absolute value of $\Delta P = 2\gamma \cos\theta m/r$ lies above a line $y=kx + m$, where x designates the available elongation of the sealing edge, k has the value $-14/30$ and m has a value in the range of 48 to 69, within the major part of an available elongation range of between 20 and 40 %, and where γ designates the surface tension of a liquid to be absorbed, r designates the radius of the largest circle that can be enclosed in any pore with walls formed by said sealing edge against the skin of the wearer at a given available elongation, and $\cos\theta m$ is the weighted value of $\cos\theta$, where θ is the wetting angle of the liquid to the sealing edge or the skin comprising the pore walls.

35. (Amended) The article according to Claim 29, wherein said free sealing edge includes a layer of a material such that a higher wetting angle of the liquid to the sealing edge material will be obtained and/or such that a higher wetting angle of the liquid to the skin of the wearer will be obtained within those regions in which said sealing edge lies against the skin and where said material smears the skin when the absorbent article is donned.

36. (Amended) The article according to Claim 29, wherein said free elastic sealing edge is provided with a layer of a material which at least partly fills out the pores in said free sealing edge when the article is donned.

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42. (Amended) The article according to Claim 41, wherein the available elongation range is 10-60%.

IN THE ABSTRACT

Please insert the Abstract attached as a separate sheet.